#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

99.28 File #:

# WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-026932 Address: 333 Burma Road **Date Inspected:** 13-Dec-2011

City: Oakland, CA 94607

OSM Arrival Time: 800 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1630

Contractor: Watson Bowman ACME **Location:** Buffalo, NY

**CWI Name:** Reno Davis, John Crabtree **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Seismic Joint Hinge A

### **Summary of Items Observed:**

On this date, Quality Assurance Inspector (QAI) Kenneth Riley was present at the Watson Bowman Acme Corporation (WBA) facility and Eagle Fabrication as requested, in Buffalo, New York to observe fabrication activities of the Seismic Expansion Joint Hinge A lanes for the San Francisco Oakland Bay Bridge (SFOBB) project.

This (QAI) Inspector met with Watson Bowman Acme Corporation (WBA) Quality Control (QCS) Supervisor John Miller and KTA-Tator (ABF Representative), Certified Welding Inspectors (CWI), Mr. Reno Davis the ABF Representative who is the Quality Control personnel for this location.

This QAI arrived at Eagle Fabrication to witness the flattening process of support plates SP13~24. This process was agreed upon between Design, Caltrans and WBA during a meeting held on 11-17-11. Eagle fabrication used the pinch rollers to roll the high points from the plates on one side then turned the plates and rolled the opposite side to ensure the flatness. Once this process was completed Eagle fabrication would then take the Support Plates and place the 19mm taper in the plates as required by the contract documents. This QAI witnessed this process on Support Plate SP3-13 being performed; once this was completed the 19mm taper appeared to be acceptable at the time of the completion for the entire cross section of the taper.

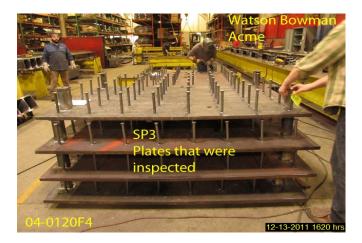
This QAI arrived at WBA and met with John Miller and Reno Davis along with Quality Control Manager Greg Ross to perform the final inspection of deck plates and support plates for shipment to regal paint. This QAI observed that on Support Plates SP1, SP2 and SP3 the 22.2mm studs that had been welded to the support plates. To confirm that the studs were welded according to the manufactures recommendation and AWS D1.5 this QAI

# WELDING INSPECTION REPORT

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used a 5lb hammer and rang (hitting the stud) approximately 15% of the studs welded to unsure soundness. A Visual observation was also conducted to ensure 360 degree flash of the studs welded also. Located on approximately 4 plates it was observed that 1-2 studs did not have the required 360 degree flash. The contractor then took the 5lb hammer and bent the stud 15 degrees from its original axis to ensure a sound weld. This is in accordance with AWS D1.5 section 7.8.1. On support plates SP1 and SP2 a 127mm wide x 75mm thick flat bar was welded using 6mm single pass fillet welds. At the time of the observation the welds appeared to be with in compliance of the contract documents. Erection aides (legs) had also been welded to the support plates for field erection. These aides would be left in place and not removed after installation. The Support Plates observed were SP1-1 and SP1-2; SP3-4~11 of 24 plates.





### **Summary of Conversations:**

Basic conservation, fundamental to completion of the tasks at hand, occurred between this QAI, ABF QC, and WBA personnel.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Riley,Ken	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer